

CLAIMS

- 1 1. A method for tracking and controlling e-mail forwarding of an encrypted
2 document generated by a publisher from a user connected to a content server to
3 a recipient user, comprising:
 - 4 (a) in response to a request from the user, preparing in the content server, an
5 e-mail message that contains a link to the publisher and an identifier for
6 the document;
 - 7 (b) sending the e-mail message to the recipient user wherein, upon receiving
8 the e-mail, the recipient user logs onto a forwarding server at the
9 document publisher;
 - 10 (c) receiving and resolving the link at the publisher and downloading a secure
11 viewer program to the recipient user and an encrypted version of the
12 requested document to the secure browser program;
 - 13 (d) requesting a decryption key for the encrypted document with the secure
14 viewer program; and
 - 15 (e) decrypting the encrypted document and displaying the document content
16 in the secure viewer program.
- 1 2. The method of claim 1 wherein step (a) comprises making the request to forward
2 the encrypted document to the recipient user with a secure viewer running in a
3 browser.
- 1 3. The method of claim 1 wherein the link in the e-mail message contains
2 information identifying the sender of the e-mail, the recipient of the e-mail and the
3 encrypted document.
- 1 4. The method of claim 3 wherein the information is inserted into the URL of the link
2 to the publisher.

- 1 5. The method of claim 3 wherein step (a) comprises encrypting the identifying
2 information in the e-mail message.
- 1 6. The method of claim 5 wherein step (a) comprises encrypting the information
2 with a public key of a public/private key pair assigned of the publisher.
- 1 7. The method of claim 1 wherein step (b) comprises opening, in a computer of the
2 recipient user, a browser in response to a selection of the link by the recipient
3 user and navigating to the forwarding server.
- 1 8. The method of claim 7 wherein step (c) comprises downloading a secure viewer
2 program into the browser in the recipient user's computer.
- 1 9. The method of claim 1 wherein step (c) comprises downloading a document
2 identifier to the secure viewer program running in the recipient user's computer.
- 1 10. The method of claim 9 wherein step (d) comprises using the document identifier
2 to request a decryption key from the forwarding server.
- 1 11. The method of claim 10 wherein step (d) further comprises returning the
2 decryption key from the forwarding server to the secure viewer program in
3 response to the document identifier.
- 1 12. The method of claim 1 further comprising logging the information in the e-mail
2 including the sender, the recipient and the document identifier by the forwarding
3 server.

1 13. The method of claim 1 wherein the link maintains a count of the number of times
2 it has been selected.

1 14. The method of claim 13 wherein the link is a one-time link.

1 15. Apparatus for tracking and controlling e-mail forwarding of an encrypted
2 document generated by a publisher from a user connected to a content server to
3 a recipient user, comprising:

4 means responsive to a request from the user for preparing in the content
5 server, an e-mail message that contains a link to the publisher and an identifier
6 for the document;

7 means for sending the e-mail message to the recipient user wherein, upon
8 receiving the e-mail, the recipient user logs onto a forwarding server at the
9 document publisher;

10 means for receiving and resolving the link at the publisher and
11 downloading a secure viewer program to the recipient user and an encrypted
12 version of the requested document to the secure browser program;

13 means for requesting a decryption key for the encrypted document with
14 the secure viewer program; and

15 means for decrypting the encrypted document and displaying the
16 document content in the secure viewer program.

1 16. The apparatus of claim 15 wherein the request to forward the encrypted
2 document to the recipient user is made with a secure viewer running in a
3 browser.

- 1 17. The apparatus of claim 15 wherein the link in the e-mail message contains
2 information identifying the sender of the e-mail, the recipient of the e-mail and the
3 encrypted document.
- 1 18. The apparatus of claim 17 wherein the information is inserted into the URL of the
2 link to the publisher.
- 1 19. The apparatus of claim 17 further comprising means for encrypting the identifying
2 information in the e-mail message.
- 1 20. The apparatus of claim 19 wherein the means for encrypting the identifying
2 information comprises means for encrypting the information with a public key of a
3 public/private key pair assigned of the publisher.
- 1 21. The apparatus of claim 15 further comprising means for opening, in a computer
2 of the recipient user, a browser in response to a selection of the link by the
3 recipient user and means for using the browser to navigate to the forwarding
4 server.
- 1 22. The apparatus of claim 21 wherein the means for downloading a secure viewer
2 program comprises means for downloading a secure viewer program into the
3 browser in the recipient user's computer.
- 1 23. The apparatus of claim 15 wherein the means for downloading an encrypted
2 version of the requested document to the secure browser program comprises
3 means for downloading a document identifier to the secure viewer program
4 running in the recipient user's computer.

- 1 24. The apparatus of claim 23 wherein the means for requesting a decryption key
2 comprises means for using the document identifier to request a decryption key
3 from the forwarding server.
- 1 25. The apparatus of claim 24 wherein the means for requesting a decryption key
2 further comprises means for returning the decryption key from the forwarding
3 server to the secure viewer program in response to the document identifier.
- 1 26. The apparatus of claim 15 further comprising means for logging the information
2 in the e-mail including the sender, the recipient and the document identifier by
3 the forwarding server.
- 1 27. The apparatus of claim 15 wherein the link maintains a count of the number of
2 times it has been selected.
- 1 28. The apparatus of claim 27 wherein the link is a one-time link.
- 1 29. A computer program product for tracking and controlling e-mail forwarding of an
2 encrypted document generated by a publisher from a user connected to a
3 content server to a recipient user, the computer program product comprising a
4 computer usable medium having computer readable program code thereon:
5 program code operable in response to a request from the user, for
6 preparing in the content server, an e-mail message that contains a link to the
7 publisher and an identifier for the document;
8 program code for sending the e-mail message to the recipient user
9 wherein, upon receiving the e-mail, the recipient user logs onto a forwarding
10 server at the document publisher;

11 program code for receiving and resolving the link at the publisher and
12 downloading a secure viewer program to the recipient user and an encrypted
13 version of the requested document to the secure browser program;
14 program code for requesting a decryption key for the encrypted document
15 with the secure viewer program; and
16 program code for decrypting the encrypted document and displaying the
17 document content in the secure viewer program.

1 30. The computer program product of claim 29 wherein the program code for
2 preparing an e-mail message comprises a secure viewer program running in a
3 browser that makes the request to forward the encrypted document to the
4 recipient user.

1 31. The computer program product of claim 29 wherein the link in the e-mail
2 message contains information identifying the sender of the e-mail, the recipient of
3 the e-mail and the encrypted document.

1 32. The computer program product of claim 31 wherein the information is inserted
2 into the URL of the link to the publisher.

1 33. The computer program product of claim 31 wherein the program code for
2 preparing an e-mail message comprises program code for encrypting the
3 identifying information in the e-mail message.

1 34. The computer program product of claim 33 wherein the program code for
2 preparing an e-mail message comprises program code for encrypting the
3 information with a public key of a public/private key pair assigned of the
4 publisher.

- 1 35. The computer program product of claim 29 wherein the program code for
2 sending the e-mail message to the recipient user comprises program code for
3 opening, in a computer of the recipient user, a browser in response to a selection
4 of the link by the recipient user and navigating to the forwarding server.
- 1 36. The computer program product of claim 35 wherein the program code for
2 downloading a secure viewer program to the recipient user comprises program
3 code for downloading a secure viewer program into the browser in the recipient
4 user's computer.
- 1 37. The computer program product of claim 29 wherein the program code for
2 downloading a secure viewer program to the recipient user comprises program
3 code for downloading a document identifier to the secure viewer program running
4 in the recipient user's computer.
- 1 38. The computer program product of claim 37 wherein the program code for
2 requesting a decryption key for the encrypted document comprises program code
3 for using the document identifier to request a decryption key from the forwarding
4 server.
- 1 39. The computer program product of claim 38 wherein the program code for
2 requesting a decryption key for the encrypted document further comprises
3 program code for returning the decryption key from the forwarding server to the
4 secure viewer program in response to the document identifier.
- 1 40. The computer program product of claim 29 further comprising program code for
2 logging the information in the e-mail including the sender, the recipient and the
3 document identifier by the forwarding server.

- 1 41. The computer program product of claim 29 wherein the link maintains a count of
2 the number of times it has been selected.
- 1 42. The computer program product of claim 41 wherein the link is a one-time link.